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EXAMINER

BELIVEAU, SCOTT E

ART UNIT

PAPER NUMBER

2614

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/814,029

Applicant(s)

CRAVEN ET AL.

Examiner

Scott Beliveau

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Miscellaneous

1. Please note that the examiner of record for this application has changed.

Response to Arguments

2. Applicant's arguments filed 18 April 2005 have been fully considered but they are not persuasive.

With respect to the rejection of claims 1-5 and 7-17 as being anticipated by Novak et al. and in particular in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., stripping away broadband protocol format information that envelops the content information or encapsulating MPEG packets within DOCSIS-formatted signals) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With respect to applicant's arguments regarding the rejection of claims 6 and 18-19, applicant's arguments appear to generally fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. In particular, it is unclear as to what specifically applicant's are arguing with respect to the examiner failing to present a *prima facie* case of obviousness. It is the examiner's presumption that the applicant is arguing that none of the criteria have been met.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Novak reference generally discloses broadband communication circuitry including a DOCSIS compatible cable modem and the motivation to combine is provided by the Brooks et al. reference. For example, the Brooks et al. reference discloses the particular usage of a cable modem with appropriate circuitry so as to interconnect and communicate with peripheral devices which further does so in a flexible and inexpensive manner (Col 2, Line 58 – Col 3, Line 3). The Novak et al. system interconnects a number of peripheral devices. Accordingly, the motivation to modify Novak et al. so as to provide a means for so that the system device could adequately communicate with each other and perform necessary data functions in a flexible and inexpensive manner is found in Brooks et al.

Similarly, the Novak et al. system utilizes a cable modem network, but does not disclose known particulars associated with the implementation of such including a “MIB” or “Dynamic Channel Change”. As set forth, the Kolze et al. reference discloses that the particular usage of such is known and provides motivation for doing so. Accordingly, the first criteria is believed to have been met.

With respect to a *prima facie* case requiring a reasonable expectation of success, the video distribution art is a predictable art and therefore a reasonable expectation of success is believed to exist in connection with the modification of a generically recited cable modem with particulars of cable modem distribution/technology. Accordingly, the second criteria is believed to have been met.

Finally, as there are no particular arguments directed towards prior art reference failing to teach or suggest all of the claimed limitations (over and above those associated with the independent claims), the third criteria is believed to have been met.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5 and 7-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Novak et al. (US Pub No. 2003/0126599).

Regarding claim 1, Novak shows a multimedia terminating device (page 2 section 0037 set top box) for providing multimedia content transmitted over a communication network and received from a broadband connection (page 2 sections 0036-0038, broadband communication network) comprising broadband communication circuitry for receiving the content in broadband format (page 2 section 0038, page 4 section 0062, receiving,

demodulation, and demultiplexing packets) and extracting the content from the broadband format (page 4 sections 0062, 0064 demultiplexing and demodulating packets, coded endcoder/decoder), and decoder circuitry for receiving the content from the broadband communication circuitry (page 4 section 0064, decoding network compatible data stream received from network), decoding the content and providing the content to at least one user device (page 4 section 0066, displaying interface on television, section 0067, sending data to PVR device) based on the content.

Regarding claim 2, Novak shows that the communication circuitry contains cable modem circuitry (page 4 section 0062, conventional modem circuitry).

Regarding claim 3, Novak shows that the format is DOCSIS (page 4 section 0062).

Regarding claim 4, Novak shows the circuitry contains a DSP (page 4 section 0069, DSP)

Regarding claim 5, Novak shows a graphics controller or processor (page 4 section 0066, graphics and sound controllers).

Regarding claim 7, Novak shows that the decoder circuitry includes audio output (page 4 section 0066, audio/video signals, separate sound controllers).

Regarding claim 8, Novak shows that the decoder circuitry includes a video output (page 4 section 0066, audio/video signals, separate graphics controllers).

Regarding claims 9 and 10, Novak shows a digital data connection for connecting an external digital device, which could be a PVR (hard disk drive) (page 4 section 0067, PVR hard disk drive, fig. 3).

Regarding claim 11, Novak shows a method for transporting a digital multimedia content over a broadband network from a central location to one or more subscribers (page 2 sections

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0036-0037, broadband communication network, set top boxes) comprising converting the digital multimedia content into a digital multimedia content signal at the central location (page 2-3 section 0042, page 3 sections 0045, 0047-0051, broadcast centers gathering programming content and ensuring it is digital quality and encoded), formatting the digital content signal into a broadband-transport-format signal (page 3 sections 0045, 0047-0051, broadcast centers gathering programming content and ensuring it is digital quality and encoded), transporting the broadband-formatted digital content signal toward the subscribers (page 3 section 0048, distribution to STBs), receiving the broadband-formatted digital content signal with, broadband communication circuitry (page 2 section 0038, page 4 section 0062, receiving, demodulation, and demultiplexing packets), extracting the digital multimedia content from the broadband transport-format signal (page 4 sections 0062, 0064 demultiplexing and demodulating packets, coded encoder/decoder), and providing the digital multimedia content at one or more outputs (page 4 section 0066, displaying interface on television, section 0067, sending data to PVR device).

Regarding claim 12, Novak shows that the format is DOCSIS (page 4 section 0062).

Regarding claim 13, Novak shows that the communication circuitry contains cable modem circuitry (page 4 section 0062, conventional modem circuitry).

Regarding claim 14, Novak shows that the decoder circuitry includes a video output (page 4 section 0066, audio/video signals, separate graphics controllers).

Regarding claim 15, Novak shows that the decoder circuitry includes audio output (page 4 section 0066, audio/video signals, separate sound controllers).

Regarding claim 16, Novak shows a digital data connection for connecting an external digital device, which could be a PVR (hard disk drive) (page 4 section 0067, PVR hard disk drive, fig. 3).

Regarding claim 17, Novak shows that the format is DOCSIS (page 4 section 0062).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Novak et al (US Pub No. 2003/0126599) in further view of Brooks et al (US Pat No. 6,816,940).

Regarding Claim 6, Novak shows that all of the circuitry is connected using a bus (fig. 3 item 314) and that MAC circuitry is used (page 2 section 0039, MAC address). Novak fails to specifically state that the bus connects a MAC of the broadband communication circuitry and a MAC of the decoder circuitry. Brooks shows that a bus connects a MAC of the broadband communication circuitry and a MAC of the decoder circuitry (fig. 2 items 224, 226, EMAC and CMAC, col. 7 lines 7-45, Ethernet MAC and Cable MAC connected by bus 214). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Novak with the ability of the communications MAC and decoder MAC to communicate through the bus, as shown in Brooks, so that the system device could adequately communicate with each other and perform necessary data functions.

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7. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novak et al (US Pub No. 2003/0126599) in further view of Kolze et al (US Pub No. 2003/0177502).

Regarding Claim 18, Novak fails to specifically state using MIB. Kolze shows using MIB in a DOCSIS system (page 8 section 0075, Management Information Base (MIB) statistic gathering). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Novak with the ability of to use MIB, as shown in Kolze, so that the system device could process the signals correctly and ensure a robust data communications system.

Regarding Claim 19, Novak fails to specifically state using Dynamic Channel Change to select a transport channel. Kolze shows using Dynamic Channel Change to select a transport channel (page 3 section 0015, page 5 section 0048). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Novak with the ability of to use Dynamic Channel Change to select a transport channel, as shown in Kolze, so that the system device could select the appropriate bandwidth so that the data was received efficiently.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (US Pat No. 6,813,643) in view of common knowledge as supported by applicant's admitted prior art (APA).

9. In consideration of claim 20, Figure 2C of the Perlman reference illustrates a "system for transmitting content over a broadband network". The reference teaches the particular distribution of MPEG encoded video content and other data through a DOCSIS only transmission scheme (Col 5, Lines 23-39) whereupon such signals are received and decoded

for display. The reference, however, is silent with respect to commonly known components and functions associated with the implementation of a DOCSIS signal transport. APA provides evidence of the fact that typical components found in a cable modem [28] for DOCSIS signal transport include a “means for stripping incoming content messages of DOCSIS format information so that the incoming content is left in encoded versions of its native format” [34] and a “media access controller coupled to the stripping means for receiving the content in the encoded version of its native format” [36] (APA: Figure 2; Page 8, Line 22 – Page 9, Line 6). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify the network interface so as to further utilize a “means for stripping . . .” and a “media access controller” for the purpose of doing as necessary to implement a DOCSIS compatible signal transport/reception. As illustrated in Figure 2C of Perlman, the system further includes “means for decoding the incoming content into its native format coupled to the media access controller” [270] (Col 1, Lines 38-46) and “means for distributing” [251] “the decoded content in its native format from the decoding means to one or more of a plurality of output ports according to the native format type” such that MPEG decoded content is rendered on a television [135] or stored for later viewing [120].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows. Applicant is reminded that in amending in response to a rejection of

claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made.

- The Basso et al. (US Pub No. 2002/0124262 A1) reference discloses the distribution of MPEG encoded data encapsulated within DOCSIS formatted messages.
- The Fisk et al. (US Pub No. 2004/0172652 A1) reference discloses a system for utilizing DOCSIS to distribute MPEG encoded video which is subsequently decoded and displayed.
- The Brown et al. (US Pub No. 2002/0141544 A1) reference discloses a bi-directional distribution network which distributes DOCSIS formatted signals which comprise MPEG payloads which are subsequently extracted for display.
- The Bushmitch et al. article discloses methods for supporting MPEG video transport through a DOCSIS network.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 571-272-7343.

The examiner can normally be reached on Monday-Friday from 8:30 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott Beliveau
Examiner
Art Unit 2614



SEB
November 2, 2005



JOHN MILLER
SUPERVISORY PATENT EXAMINER
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